



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,502	02/28/2002	Masahiro Tada	5225.0226-00	7466
22852	7590	11/23/2005	EXAMINER	
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			HASHEM, LISA	
		ART UNIT	PAPER NUMBER	2645

DATE MAILED: 11/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/084,502	TADA ET AL.
	Examiner Lisa Hashem	Art Unit 2645

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 11 August 2005.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-4 and 6-12 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) 4, 6-8 and 12 is/are allowed.
 6) Claim(s) 1-3 and 9-11 is/are rejected.
 7) Claim(s) 8-11 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 28 February 2002 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ . |

FINAL DETAILED ACTION

Drawings

1. The drawings are objected as cited in the last Non-Final Office Action filed on 5-20-2005.

Claim Objections

2. Claim 8 recites the limitation "the predetermined period". There is insufficient antecedent basis for this limitation in the claim.
3. Claim 9 recites the limitation "the predetermined functions". There is insufficient antecedent basis for this limitation in the claim.
4. Claim 10 recites the limitation "the disconnection discriminating conditions". There is insufficient antecedent basis for this limitation in the claim.
5. Claim 11 recites the limitation "the predetermined functions". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 2, 3, 9, and 10 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by U.S. Patent Application Publication No. 2003/0078002 by Sanjeev et al, hereinafter Sanjeev.

Regarding claim 2, Sanjeev discloses a radio communication device or client device (e.g.

printer, PDS, or wireless/cellular telephone) (Fig. 3, 304) on a network or wireless personal area network (WPAN) (Fig. 3, 300) for communicating with a target communication terminal or remote device (e.g. a laptop) (Fig. 3, 302) on the network (section 0017, line 1 - section 0019, line 12), comprising:

a service information memory (Fig. 3, 310) configured to store service information that corresponds to the target communication terminal so that predetermined functions can be performed with the target communication terminal over the network (section 0026, line 1 – section 0027, line 14; section 0029, lines 14; section 0041, lines 1-12);

a judging module (inherently in client device) configured to judge whether predetermined disconnection discriminating conditions are satisfied by repeating a connection process with the target communication terminal before disconnecting radio communication with the target communication terminal (section 0039, line 1 – section 0044, line 9); and

a communication control module or processor (Fig. 3, 308) configured to invalidate the predetermined functions associated with the service information that corresponds to the target communication terminal (e.g. when the wireless link is terminated) and storing the service information in the service information memory when the predetermined disconnection discriminating conditions are satisfied (section 0026, line 1 – section 0027, line 14; section 0039, lines 11-20; section 0041, lines 1-12).

Regarding claim 3, Sanjeev discloses a radio communication device or client device (e.g. printer, PDS, or wireless/cellular telephone) (Fig. 3, 304) in a network or wireless personal area network (WPAN) (Fig. 3, 300) for communicating with a target communication terminal or

remote device (e.g. a laptop) (Fig. 3, 302) in the network (section 0017, line 1 - section 0019, line 12), comprising:

a service information memory (Fig. 3, 310) configured to store service information so that predetermined functions can be performed with the target communication terminal (section 0026, line 1 – section 0027, line 14; section 0029, lines 14; section 0041, lines 1-12);

a registration module (e.g. RFCOMM protocol or L2CAP protocol) configured to register communication controlling information that defines discriminating conditions for establishing a new connection with the target communication terminal or disconnecting an existing connection with the target communication terminal (section 0037, line 1 – section 0039, line 4); and

a communication control module or processor (Fig. 3, 308) configured to communicate with the target communication terminal by using the service information read out from the service information memory based on the communication controlling information (section 0026, line 1 – section 0027, line 14; section 0038, line 1 – section 0039, line 20; section 0039, line 1 – section 0044, line 9).

Regarding claim 9, Sanjeev discloses a method for controlling a communication device or client device (e.g. printer, PDS, or wireless/cellular telephone) (Fig. 3, 304) that exchanges data with a target communication terminal or remote device (e.g. a laptop) (Fig. 3, 302) over a radio network or wireless personal area network (WPAN) (Fig. 3, 300) (section 0017, line 1 - section 0019, line 12) when establishing a new radio communication connection between the communication device and a target communication terminal, the communication device having a memory (Fig. 3, 310) for storing various types of data (0026, line 1 – section 0027, line 14; section 0029, lines 1-14), the method comprising:

judging whether predetermined connection discriminating conditions are satisfied by repeating a target communication terminal discovery process before performing predetermined functions (section 0030, line 1 – section 0036, line 8; section 0039, lines 16-20); and performing the predetermined functions through the radio communication connection by extracting required service information or service channel number (Fig. 3, 322) from memory to perform the predetermined functions between the communication device and the target communication terminal, the required service information is stored in the memory by executing the predetermined functions with the target communication when the predetermined connection conditions are satisfied (0026, line 1 – section 0027, line 14; section 0037, lines 1-16).

Regarding claim 10, Sanjeev discloses a method for controlling a communication device or client device (e.g. printer, PDS, or wireless/cellular telephone) (Fig. 3, 304) that exchanges data with a target communication terminal or remote device (e.g. a laptop) (Fig. 3, 302) over a network or wireless personal area network (WPAN) (Fig. 3, 300) (section 0017, line 1 - section 0019, line 12), when disconnecting a radio communication connection established between the communication device and a target communication terminal (section 0037, lines 16-24), the communication device having a memory (Fig. 3, 310) for storing various types of data including executed service information (0026, line 1 – section 0027, line 14; section 0029, lines 1-14; section 0041, lines 1-12), the method comprising:

judging whether disconnection conditions are satisfied by repeating a target communication terminal connection process (section 0039, lines 1-20); and invalidating predetermined functions corresponding to the executed service information so that the predetermined functions between the communication device and the target communication

terminal can be performed when disconnection discriminating conditions are satisfied (section 0037, line 16 – section 0039, line 20; section 0041, line 1 – section 0044, line 9).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanjeev in view of U.S. Patent No. 5,287,545 by Kallin.

Regarding claim 1, Sanjeev discloses a radio communication device or client device (e.g. printer, PDS, or wireless/cellular telephone) (Fig. 3, 304) on a network or wireless personal area network (WPAN) (Fig. 3, 300) for communicating with a target communication terminal or remote device (e.g. a laptop) (Fig. 3, 302) on the network (section 0017, line 1 - section 0019, line 12), comprising:

a memory (Fig. 3, 310) configured to store service information so that predetermined functions can be performed over the network with the target communication terminal (section 0026, line 1 - section 0027, line 1-14; section 0029, lines 14; section 0041, lines 1-12);
a judging module (inherently within client device) configured to judge whether predetermined connection conditions with the target communication terminal are satisfied by repeating a target communication terminal discovery process (section 0030, line 1 – section 0036, line 8; section 0039, lines 16-20); and

a communication control module or processor (Fig. 3, 308) configured to execute the predetermined functions with the target communication terminal by reading service information associated with the target communication terminal or service channel number (Fig. 3, 322) from the service information memory when the predetermined connection conditions are satisfied (section 0026, line 1 – section 0027, line 14; section 0037, lines 7-16).

Sanjeev does not disclose repeating a discovery process before establishing radio communications with another target communication terminal.

Kallin discloses a radio communication device or mobile station on a network or mobile radiotelephone system for communicating with a target communication terminal or base station on the network (see Abstract; col. 2, lines 21-38; col. 3, line 31 – col. 4, line 11), comprising: a MSC configured to judge whether predetermined connection conditions with the target communication terminal are satisfied by repeating a target communication terminal discovery process before establishing radio communications with another target communication terminal (e.g. a new base station in a new cell) (Fig. 5; col. 4, line 48 - col. 5, line 51).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the method of Sanjeev to include repeating a discovery process before establishing radio communications with another target communication terminal as taught by Kallin. One of ordinary skill in the art would have been lead to make such a modification to allow the radio communication device to continue establish a connection with a neighboring device to retrieve services when a disconnection occurs with a target device.

Regarding claim 11, Sanjeev discloses a method for controlling a communication device or client device (e.g. printer, PDS, or wireless/cellular telephone) (Fig. 3, 304) that exchanges

data with target communication terminal or remote device (e.g. a laptop) (Fig. 3, 302) over a network or wireless personal area network (WPAN) (Fig. 3, 300) (section 0017, line 1 - section 0019, line 12), the communication device having a memory mechanism (Fig. 3, 310) for storing various types of data (0026, line 1 – section 0027, line 14; section 0029, lines 1-14), the method comprising:

registering communication controlling information that defines conditions for discriminating between a new radio communication connection established between the communication device and the target communication terminal and a disconnection of radio communication connection established between the communication device and the target communication terminal (section 0038, line 1 – section 0039, line 20);

judging whether a radio communication connection between the communication device and a target communication terminal is in a connection status or in a disconnection status, based on the communication controlling information (section 0037, lines 1-24); and

performing radio communications with the target communication terminal by using service information that executes predetermined functions between the communication device and the target communication terminal, the service information being stored in memory based on a discrimination result (section 0037, line 1 – section 0039, line 20; section 0039, line 1 – section 0044, line 9).

Sanjeev does not disclose registering communication controlling information that defines conditions for discriminating between a new radio communication connection established between the communication device and a new the target communication terminal.

Kallin discloses a radio communication device or mobile station on a network or mobile radiotelephone system for communicating with a target communication terminal or base station on the network (see Abstract; col. 2, lines 21-38; col. 3, line 31 – col. 4, line 11), comprising: registering communication controlling information that defines conditions for discriminating between a new radio communication connection established between the communication device and a new target communication terminal (e.g. a new base station in a new cell) and a disconnection of radio communication connection established between the communication device and the target communication terminal (Fig. 5; col. 4, line 48 - col. 5, line 51).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the method of Sanjeev to include registering communication controlling information that defines conditions for discriminating between a new radio communication connection established between the communication device and a new the target communication terminal as taught by Kallin. One of ordinary skill in the art would have been lead to make such a modification to allow the radio communication device to establish a connection with a neighboring device to retrieve services when a disconnection occurs with a target device.

Allowable Subject Matter

10. Claims 4, 6, 7 (depending on claim 6), 8 (depending on claim 6; with objection of claim 8 pending), and 12 are allowed.

11. The following is a statement of reasons for the indication of allowable subject matter:

Sanjeev discloses a communication device comprising: a client device that communicates with a remote device, wherein the client device comprises: a memory that stores service information for predetermined functions and connection data when a wireless link needs to be

Art Unit: 2645

reestablished; a transceiver to exchange data with the remote device through radio; a protocol stack to define disconnection conditions for an existing radio communication connection and what type of disconnection occurred in a wireless link; a H/I element that allows for human interaction with the client device; and the client device initiating reconnection with a remote device (section 0028, lines 1-16; section 0034, lines 1-9; section 0037, line 1 – section 0044, line 9).

Kallin discloses a radio communication device or mobile station on a network or mobile radiotelephone system for communicating with a target communication terminal or base station on the network (see Abstract; col. 2, lines 21-38; col. 3, line 31 – col. 4, line 11), comprising: registering communication controlling information that defines conditions for discriminating between a new radio communication connection established between the communication device and a new target communication terminal and a disconnection of radio communication connection established between the communication device and the target communication terminal; and a MSC configured to judge whether predetermined connection conditions with the target communication terminal are satisfied by repeating a target communication terminal discovery process before establishing radio communications with another target communication terminal (Fig. 5; col. 4, line 48 - col. 5, line 51).

None of the prior art disclose the structural elements in claims 4 and 6 and designating a user to set up communication conditions for a newly established radio communication connection with a target communication terminal or for discriminating a disconnection of an existing radio communication connection with a target communication terminal as claimed in claim 4 and a user setting up discriminating conditions for discriminating between establishing a

new radio communication connection between a communication device and a target communication terminal and disconnecting a radio communication connection established between the communication device and the target communication terminal as claimed in claim 12.

Response to Arguments

12. Any rejections/objections filed on 5-20-2005 not addressed in this action are withdrawn.
13. Applicant's arguments with respect to claims 1-4 and 6-12 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
15. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2645

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- U.S. Patent No. 6,807,413 by Honda discloses a communication interruption occurs and the communication is re-started via a call re-origination operation

17. Any response to this action should be mailed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Or faxed to:

(571) 273-8300 (for formal communications intended for entry)

Or call:

(571) 272-2600 (for customer service assistance)

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa Hashem whose telephone number is (571) 272-7542. The examiner can normally be reached on M-F 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (571) 272-7547. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

Art Unit: 2645

19. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



lh

November 11, 2005



FAN TSANG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600